

9. A NEW RECORD OF REEF FISH *ISTIGOBIUS DIADEMA* (STEINDACHNER 1876), FROM ANDAMAN ISLAND

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Introduction

The Gobiidae is the largest family of marine fishes in the world because of their small size and bamboozling behaviour. Gobioid species reported from Andaman and Nicobar Islands have been a source of continuous interest since the time of Blyth (1846, 1863), Day (1875, 1889) and Hora (1934). As per the recent checklist of fishes by Rao (2009), 29 species of gobioid fishes are known to occur in Andaman and Nicobar Islands.

A field survey was conducted in January 2008 in the coral reef area of the west coast of Inglis Island (12° 08'-12° 09' N; 93° 07'-93° 08' E), South Andaman. Three specimens of Gobioid fishes were collected by using cast net. The morphometric measurements and meristematic counts of the species were calculated (Bohlke and Robins 1968). All counts and measurements were taken with dial calipers, and meristic counts were determined with the aid of a dissection microscope. The collected specimens are preserved in 4% formaldehyde and deposited in the National Zoological Collection (Reg. No. 4305) of Zoological Survey of India at Port Blair. A detailed

scrutiny of fish specimens collected from coral reef ecosystem of Inglis Island, Ritchie's Archipelago, South Andaman, led to the diagnosis of a new record, *Istigobius diadema* (Steindachner 1876) (Family: Gobiidae) (Fig. 1).

Systematic Account

Order : Perciformes
 Family : Gobiidae
 Genus : *Istigobius diadema* (Steindachner, 1876)
 Type Locality : Indo-West Pacific

Description: Body moderately elongate, compressed posteriorly. Its depth from 1.8 to 2.0 cm and length 10.5 to 12.0 cm; head slightly depressed; snout and upper jaw was projecting beyond lower jaw; diameter of eye 0.4-0.5 cm; gill opening not extending anteriorly to a vertical through pre-opercular margin. Pelvic fins united medially its length ranging from 1.8 to 2.0 cm; Pectoral fin slightly longer than pelvic fin 2.1 to 2.2 cm; interdorsal space 2.0 to 2.2 cm; scales ctenoid excepting operculum, occipital region, breast and

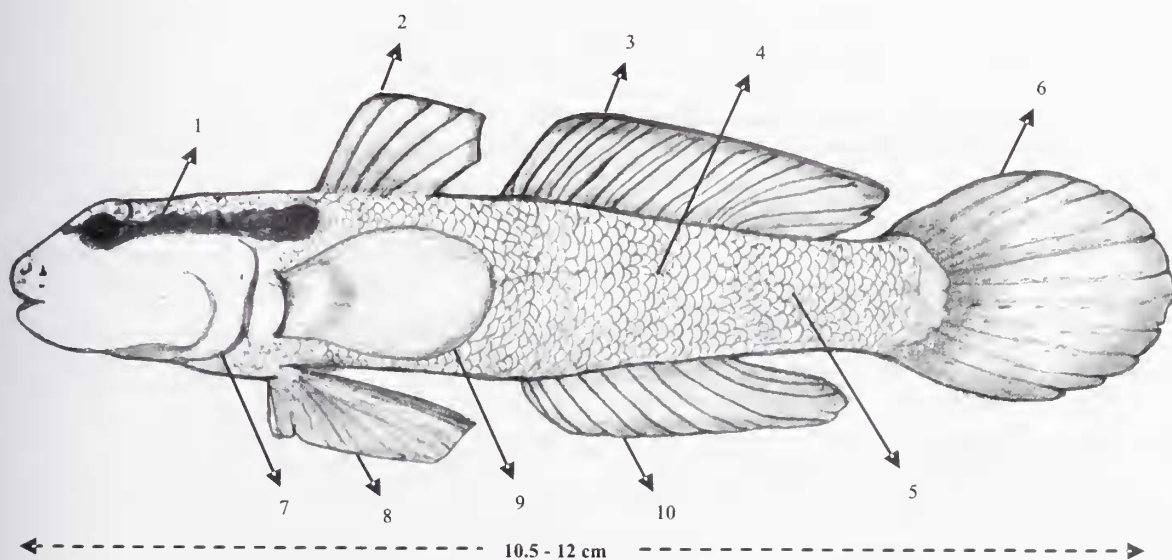


Fig. 1: Schematic diagram of *Istigobius diadema* (Steindachner, 1876)

1. Bold-black line extending from eye to pectoral-fin base; 2. 1st dorsal fin rays (VI); 3. 2nd dorsal fin rays (I/10);
 4. Transverse line scales (10 - 11); 5. Lateral line scales (31 - 34); 6. Caudal fin rays (19); 7. Operculum; 8. Pelvic fin rays (1/5)
 9. Pectoral fin rays (18 - 19); 10. Anal fin rays (10)

pectoral fin base with cycloid scales, other part of head naked. Sensory canals and pores present on head; longitudinal pattern of sensory-papillae rows on cheek; a pair of short sensory papillae just behind chin. Head and body pale grayish brown, very bold dark line proceeding from posterior portion of eyes along sensory pore path to first dorsal origin and a dark stripe connecting both the eyes anteriorly.

Ecology: Found on coral rubble areas at the depth of 2 m.

Distribution: Eastern Indian Ocean and Indonesia

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faunistic survey and Dr. C. Raghunathan, Officer-in-Charge, Zoological Survey of India, National Coral Reef Research Institute, Andaman and Nicobar Regional Centre, Port Blair for the facilities and encouragement to conduct this work. Thanks are also due to Chief Wildlife Warden, Port Blair and District Forest Officer, ACF and Range Officer, Havelock, for their permission and help in surveying this protected area. The valuable help and excellent co-operation extended by G. Ponnuswamy, Photographer, and A. Polycap, Collection Tender, are also gratefully acknowledged. We are grateful to Dr. O. Murdey, Programme Manager, Division of International Programme, National Science Foundation, Washington, D.C., who assisted by sharing his knowledge.

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10. A REPORT ON THE MIGRATION OF THE BUTTERFLY *PHALANTA ALCIPPE* (NYMPHALIDAE) IN THE ANDAMAN & NICOBAR ISLANDS

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The butterfly fauna of the Andaman & Nicobar Islands has not received much attention. Although more than 150 species of butterflies have been recorded in the Andaman groups of islands (Ferrari 1951; Khatri 1989; Soubadra Devy *et al.* 1994), nothing is known about their status, distribution and ecology. While conducting a study on the animal resource base available to the Jarawas of the Andaman Islands, on May 10, 2002, at around 10:20 hrs, I came across a swarm of tawny brown butterflies crossing the busy road of Port Blair in the south-north direction. I counted about 37 individuals per minute from a vantage point. The same swarm was observed near the Netaji Stadium, Port Blair, and near the Secretariat, all proceeding towards north. Later, I identified the species as the Small Leopard *Phalanta alcippe* Cramer.

Williams (1938) had listed 66 migrant species from India. He did not list the Small Leopard in his list, although

he reported the Common Leopard *Phalanta phalantha* (Drury) as a common migratory species of India and Sri Lanka. Wynter-Blyth (1957) had also not included the Small Leopard among migratory species.

Apparently, the onset of the south-west monsoon in the southern Andamans could be the main reason for the initiation of this migratory behaviour, on May 11-12, 2002. Even during a drizzle, this species moved with ease in small aggregations comprising two or three individuals flying at a height of 1-2 m above the ground level.

The Small Leopard is a locally common butterfly mostly found in the forested tracts of the southern Andamans. During my stay in September-October 2001 and April-May 2002 the population of the Small Leopard butterfly in the Jarawa Reserve was fairly good and evenly distributed.